ELSEVIER

Surface Science 347 (1996) 387–389

surface science

# Author index

Aliev, V.S., V.N. Kruchinin and M.R. Baklanov, Adsorption of molecular fluorine on the Si(100) surface: an ellipsometric study 347 (1996) 97
Altman, M.S. and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265
Andersson, C.B.M., U.O. Karlsson, M.C. Håkansson, L.Ö. Olsson, L. Ilver, J. Kanski and P.-O. Nilsson, Surface atomic structure of InAs$(\overline{111})2\times 2$ and InSb$(\overline{111})2\times 2$ studied by core level spectroscopy 347 (1996) 199
Antonini, A., see Zacchigna 347 (1996) 53
Artsyukhovich, A.N., V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303
Astaldi, C., see Zacchigna 347 (1996) 53

Bagus, P.S., see Schönnenbeck 347 (1996) 337
Baklanov, M.R., see Aliev 347 (1996) 97
Bauer, E., see Altman 347 (1996) 265
Bondzie, V.A., P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319
Borgmann, D., see Krause 347 (1996) 1
Borstel, G., see Paniago 347 (1996) 46
Box, F.M.A., see Raukema 347 (1996) 151
Braun, J., see Paniago 347 (1996) 46
Brun, D., see Seehofer 347 (1996) L55
Butler, D.A., see Raukema 347 (1996) 151

Cappus, D., see Schönnenbeck 347 (1996) 337
Carré, M.-N., D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the $(1\times 1)$CO phase on NaCl(100): a fully quantum study 347 (1996) 128
Castro, G.R., see Weiß 347 (1996) 117
Charny, L.A., see Marichev 347 (1996) 228
Christmann, K., see Parschau 347 (1996) 63
Comicioli, C., see Zacchigna 347 (1996) 53
Crotti, C., see Zacchigna 347 (1996) 53

Danailov, D.M., D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215
Daudin, B., see Seehofer 347 (1996) L55
Dvurechenskii, A.V., V.A. Zinovyev and A.F. Faizullina, Oscillations of step velocity at sputtering of Si(111) vicinal surfaces by low-energy Xe ions 347 (1996) 111
Dwyer, D.J., see Bondzie 347 (1996) 319

Eltester, B. and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39
Ernst, H.-J., see Schwenger 347 (1996) 25
Etgens, V.H., see Seehofer 347 (1996) L55
Evangelakis, G.A. and N.I. Papanicolaou, Adatom self-diffusion processes on (001) copper surface by molecular dynamics 347 (1996) 376

Faizullina, A.F., see Dvurechenskii 347 (1996) 111
Falkenberg, G., see Seehofer 347 (1996) L55
Fauster, Th., see Weiß 347 (1996) 117
Freund, H.-J., see Schönnenbeck 347 (1996) 337
Furukawa, T. and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193

Gee, P.E., see Qi 347 (1996) 289
Girardet, C., see Carré 347 (1996) 128
Goldmann, A., see Paniago 347 (1996) 46
Gomer, R., see Whitten 347 (1996) 280
Gumhalter, B., Different aspects of the Debye–Waller factor in various atom–surface scattering theories 347 (1996) 237

Haase, J., see Wilde 347 (1996) 33
Håkansson, M.C., see Andersson 347 (1996) 199
Harrison, I., see Artsyukhovich 347 (1996) 303
Heinz, K., see Weiß 347 (1996) 117
Heuer, D., see Müller 347 (1996) 80
Hicks, R.F., see Qi 347 (1996) 289

Igari, Y., see Takaoka 347 (1996) 105
Ilver, L., see Andersson 347 (1996) 199
Imbihl, R., see Mertens 347 (1996) 355

Jablonski, A. and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207
Johnson, R.L., see Seehofer 347 (1996) L55

Kanski, J., see Andersson 347 (1996) 199
Karlsson, U.O., see Andersson 347 (1996) 199
King, B.V., see Lu 347 (1996) L61
Kleban, P., see Bondzie 347 (1996) 319
Kleyn, A.W., see Raukema 347 (1996) 151
Klinkmann, J., see Schönnenbeck 347 (1996) 337
Köhler, U., see Müller 347 (1996) 80
Koike, K., see Furukawa 347 (1996) 193
Krause, J., D. Borgmann and G. Wedler, Photoelectron spectroscopic study of the adsorption of carbon dioxide on Cu(110) and Cu(110)/K – as compared with the systems Fe(110)/$CO_2$ and Fe(110)/K + $CO_2$ 347 (1996) 1
Kruchinin, V.N., see Aliev 347 (1996) 97
Kusunoki, I., see Takaoka 347 (1996) 105

Lee, S.M. and Y.H. Lee, Electronic structures of hydrogenated Si(001) surfaces 347 (1996) 329
Lee, Y.H., see Lee 347 (1996) 329
Lemoine, D., see Carré 347 (1996) 128
Lu, Q.B., D.J. O'Connor, B.V. King and R.J. MacDonald, Local electrostatic potential determination of Cs/Cu(111) surfaces by negative ion spectroscopy 347 (1996) L61

MacDonald, R.J., see Lu 347 (1996) L61
Madey, T.E., see Sack 347 (1996) 367
Madix, R.J., see Merrill 347 (1996) 249
Marichev, V.A. and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228
Matteucci, M., see Zacchigna 347 (1996) 53
Matzdorf, R., see Paniago 347 (1996) 46
McBreen, P.H., see Rochefort 347 (1996) 11
Meister, G., see Paniago 347 (1996) 46
Merrill, P.B. and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249
Mertens, F. and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355
Müller, T., D. Heuer, H. Pfnür and U. Köhler, Domain walls and adsorbate–step interactions: an STM study of sulphur layers on Ru(0001) 347 (1996) 80
Muramatsu, M., see Teraoka 347 (1996) 182

Nilsson, P.-O., see Andersson 347 (1996) 199

O'Connor, D.J., see Danailov 347 (1996) 215
O'Connor, D.J., see Lu 347 (1996) L61
Olsson, L.Ö., see Andersson 347 (1996) 199
Ottaviani, C., see Zacchigna 347 (1996) 53

Pangher, N., see Wilde 347 (1996) 33
Paniago, R., R. Matzdorf, G. Meister, A. Goldmann, J. Braun and G. Borstel, Electron diffraction in angle-resolved UV-photoemission spectra from Au(111) 347 (1996) 46
Papanicolaou, N.I., see Evangelakis 347 (1996) 376
Parschau, M. and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63
Perfetti, P., see Zacchigna 347 (1996) 53
Peters, G.H., The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169
Petterson, L.G.M., see Schönnenbeck 347 (1996) 337
Petukhov, A.V., On the origin of surface second harmonic anisotropy on Ag(111) at low frequencies 347 (1996) 143
Pfnür, H., see Müller 347 (1996) 80
Picaud, S., see Carré 347 (1996) 128
Prince, K.C., see Zacchigna 347 (1996) 53

Qi, H., P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289
Quaresima, C., see Zacchigna 347 (1996) 53

Rangelov, G., see Weiß 347 (1996) 117
Raukema, A., D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151
Rochefort, A., P.H. McBreen and D.R. Salahub, Bond selectivity in the dissociative adsorption of $c$-$CH_2N_2$ on single crystals: a comparative DFT-LSD investigation for Pd(110) and Cu(110) 347 (1996) 11
Rosei, R., see Zacchigna 347 (1996) 53

Sack, N.J. and T.E. Madey, Coverage dependent azimuthal orientations of $PF_3$ on Ru(0001): adsorbate–substrate versus interadsorbate interactions in rotational dynamics 347 (1996) 367
Salahub, D.R., see Rochefort 347 (1996) 11
Sastry, M., see Zacchigna 347 (1996) 53
Schönnenbeck, M., D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337
Schwenger, L. and H.-J. Ernst, K induced faceting, defaceting, and flux stabilized structures in Cu(115) 347 (1996) 25
Seehofer, L., V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55
Snowdon, K.J., see Danailov 347 (1996) 215
Starke, U., see Weiß 347 (1996) 117

Takagaki, T., see Takaoka 347 (1996) 105
Takaoka, T., T. Takagaki, Y. Igari and I. Kusunoki, Observation of c(4 × 4) LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105
Tatarenko, S., see Seehofer 347 (1996) L55
Teraoka, Y. and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

Uebing, C., see Eltester 347 (1996) 39
Ukraintsev, V.A., see Artsyukhovich 347 (1996) 303

Veron, M.B., see Seehofer 347 (1996) L55

Wedler, G., see Krause 347 (1996) 1
Weiß, W., U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117

Whitten, J.E. and R. Gomer, Electron impact on benzene layers on W(110) 347 (1996) 280
Wilde, L., N. Pangher and J. Haase, SEXAFS analysis of the Cu(110)-(2 × 3)-N structure 347 (1996) 33

Xin, Q.-S. and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

Zacchigna, M., C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53
Zemek, J., see Jablonski 347 (1996) 207
Zhu, X.-Y., see Xin 347 (1996) 346
Zinovyev, V.A., see Dvurechenskii 347 (1996) 111

ELSEVIER

Surface Science 347 (1996) 390–395

surface science

# Subject index

## THEORETICAL METHODS, MODELS AND TECHNIQUES

### Atom–solid interactions, scattering, diffraction

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the (1 × 1)CO phase on NaCl(100): a fully quantum study 347 (1996) 128
B. Gumhalter, Different aspects of the Debye–Waller factor in various atom–surface scattering theories 347 (1996) 237

### Computer simulations

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the (1 × 1)CO phase on NaCl(100): a fully quantum study 347 (1996) 128
G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169
A. Jablonski and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207
D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215

### Density functional calculations

A. Rochefort, P.H. McBreen and D.R. Salahub, Bond selectivity in the dissociative adsorption of $c$-$CH_2N_2$ on single crystals: a comparative DFT-LSD investigation for Pd(110) and Cu(110) 347 (1996) 11

### Electron density, excitation spectra calculations

A.V. Petukhov, On the origin of surface second harmonic anisotropy on Ag(111) at low frequencies 347 (1996) 143

### Equilibrium thermodynamics and statistical mechanics

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169
Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

### Ion–solid interactions, scattering, channeling

D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215
Q.B. Lu, D.J. O'Connor, B.V. King and R.J. MacDonald, Local electrostatic potential determination of Cs/Cu(111) surfaces by negative ion spectroscopy 347 (1996) L61

### Ising models

Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

### Models of non-equilibrium phenomena

Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

### Models of surface chemical reactions

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

### Molecular dynamics

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169
D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215
A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303
G.A. Evangelakis and N.I. Papanicolaou, Adatom self-diffusion processes on (001) copper surface by molecular dynamics 347 (1996) 376

### Non-equilibrium thermodynamics and statistical mechanics

Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

### Semi-empirical models and model calculations

R. Paniago, R. Matzdorf, G. Meister, A. Goldmann, J. Braun and G. Borstel, Electron diffraction in angle-resolved UV-photoemission spectra from Au(111) 347 (1996) 46
Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182
D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215
S.M. Lee and Y.H. Lee, Electronic structures of hydrogenated Si(001) surfaces 347 (1996) 329

## EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

### Auger electron spectroscopy

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39
M. Parschau and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63
T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of c(4 × 4) LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105

### Chemical vapor deposition

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

### Desorption induced by electronic transitions (DIET)

*Angle resolved DIET* (including electron stimulated desorption ion angular distribution (ESDIAD))

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346
N.J. Sack and T.E. Madey, Coverage dependent azimuthal orientations of $PF_3$ on Ru(0001): adsorbate–substrate versus interadsorbate interactions in rotational dynamics 347 (1996) 367

*Electron stimulated desorption (ESD)*

J.E. Whitten and R. Gomer, Electron impact on benzene layers on W(110) 347 (1996) 280

*Photon stimulated desorption (PSD)*

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

*Surface photochemistry*

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

### Electrical transport measurements

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

### Electrochemical methods

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

### Electron emission measurements

*Secondary electron emission*

T. Furukawa and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193

### Electron energy loss spectroscopy

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249
M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

### Electron microscopy

F. Mertens and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355

*Low-energy electron microscopy (LEEM)*

M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265

### Electron–solid diffraction

*Low energy electron diffraction (LEED)*

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39
M. Parschau and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63
T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of c(4 × 4) LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105
W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117
M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265
F. Mertens and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355

### Electron–solid scattering and transmission – inelastic

T. Furukawa and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193

### Ion scattering spectroscopy

*Low energy ion scattering (LEIS)*

A.V. Dvurechenskii, V.A. Zinovyev and A.F. Faizullina, Oscillations of step velocity at sputtering of Si(111) vicinal surfaces by low-energy Xe ions 347 (1996) 111

### Molecule–solid reactions

A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

**Non-linear optical methods**

***Second harmonic generation***

A.V. Petukhov, On the origin of surface second harmonic anisotropy on Ag(111) at low frequencies 347 (1996) 143

**Photoelectron spectroscopy**

J. Krause, D. Borgmann and G. Wedler, Photoelectron spectroscopic study of the adsorption of carbon dioxide on Cu(110) and Cu(110)/K – as compared with the systems Fe(110)/$CO_2$ and Fe(110)/K + $CO_2$ 347 (1996) 1

***Angle resolved photoemission***

R. Paniago, R. Matzdorf, G. Meister, A. Goldmann, J. Braun and G. Borstel, Electron diffraction in angle-resolved UV-photoemission spectra from Au(111) 347 (1996) 46

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53

C.B.M. Andersson, U.O. Karlsson, M.C. Håkansson, L.Ö. Olsson, L. Ilver, J. Kanski and P.-O. Nilsson, Surface atomic structure of InAs($\overline{111}$)2 × 2 and InSb($\overline{111}$)2 × 2 studied by core level spectroscopy 347 (1996) 199

***Soft X-ray photoelectron spectroscopy (using synchrotron radiation)***

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53

***Visible and ultraviolet photoelectron spectroscopy***

V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319

***X-ray photoelectron spectroscopy***

A. Jablonski and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207

V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319

**Photon absorption spectroscopy**

***Infrared absorption spectroscopy***

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

***Near edge extended X-ray absorption fine structure (NEXAFS)***

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

***Surface extended X-ray absorption fine structure (SEXAFS)***

L. Wilde, N. Pangher and J. Haase, SEXAFS analysis of the Cu(110)-(2 × 3)-N structure 347 (1996) 33

**Reflection spectroscopy**

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

**Scanning tunneling microscopy**

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

T. Müller, D. Heuer, H. Pfnür and U. Köhler, Domain walls and adsorbate–step interactions: an STM study of sulphur layers on Ru(0001) 347 (1996) 80

**Thermal desorption spectroscopy**

M. Parschau and K. Christmann, The growth of aluminum on a rhenium (10$\bar{1}$0) surface 347 (1996) 63

A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303

V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319

**Work function measurements**

M. Parschau and K. Christmann, The growth of aluminum on a rhenium (10$\bar{1}$0) surface 347 (1996) 63

V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319

**PHENOMENA**

**Adsorption kinetics**

J. Krause, D. Borgmann and G. Wedler, Photoelectron spectroscopic study of the adsorption of carbon dioxide on Cu(110) and Cu(110)/K – as compared with the systems Fe(110)/$CO_2$ and Fe(110)/K + $CO_2$ 347 (1996) 1

V.S. Aliev, V.N. Kruchinin and M.R. Baklanov, Adsorption of molecular fluorine on the Si(100) surface: an ellipsometric study 347 (1996) 97

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249
A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303
V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319

**Atom–solid interactions**

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the (1 × 1)CO phase on NaCl(100): a fully quantum study 347 (1996) 128

**Catalysis**

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249
V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319
M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

**Chemisorption**

A. Rochefort, P.H. McBreen and D.R. Salahub, Bond selectivity in the dissociative adsorption of $c$-$CH_2N_2$ on single crystals: a comparative DFT-LSD investigation for Pd(110) and Cu(110) 347 (1996) 11
L. Wilde, N. Pangher and J. Haase, SEXAFS analysis of the Cu(110)-(2 × 3)-N structure 347 (1996) 33
M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53
P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249
H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289
A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303
V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319
M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337
N.J. Sack and T.E. Madey, Coverage dependent azimuthal orientations of $PF_3$ on Ru(0001): adsorbate–substrate versus interadsorbate interactions in rotational dynamics 347 (1996) 367

**Compound formation**

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39
T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of c(4 × 4) LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105

**Corrosion**

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

**Electron–solid interactions**

A. Jablonski and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207

**Epitaxy**

W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117
H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

**Growth**

M. Parschau and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63

**Ion–solid interactions**

D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215

**Nucleation**

M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265

**Oxidation**

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228
M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265
V.A. Bondzie, P. Kleban and D.J. Dwyer, XPS identification of the chemical state of subsurface oxygen in the O/Pd(110) system 347 (1996) 319

**Photochemistry**

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

**Photoelectron emission**

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53

**Photon stimulated desorption**

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

**Physical adsorption**

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the (1 × 1)CO phase on NaCl(100): a fully quantum study 347 (1996) 128

A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303

**Quantum effects**

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the (1 × 1)CO phase on NaCl(100): a fully quantum study 347 (1996) 128

**Secondary electron emission**

T. Furukawa and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193

**Sputtering**

A.V. Dvurechenskii, V.A. Zinovyev and A.F. Faizullina, Oscillations of step velocity at sputtering of Si(111) vicinal surfaces by low-energy Xe ions 347 (1996) 111

**Sticking**

A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151

A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303

**Surface chemical reaction**

T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of c(4 × 4) LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

F. Mertens and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355

**Surface diffusion**

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

G.A. Evangelakis and N.I. Papanicolaou, Adatom self-diffusion processes on (001) copper surface by molecular dynamics 347 (1996) 376

**Surface electrical transport (surface conductivity, surface recombination, etc.)**

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

**Surface electronic phenomena (work function, surface potential, surface states, etc.)**

Q.B. Lu, D.J. O'Connor, B.V. King and R.J. MacDonald, Local electrostatic potential determination of Cs/Cu(111) surfaces by negative ion spectroscopy 347 (1996) L61

**Surface melting**

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169

**Surface relaxation and reconstruction**

L. Wilde, N. Pangher and J. Haase, SEXAFS analysis of the Cu(110)-(2 × 3)-N structure 347 (1996) 33

W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117

M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265

**Surface segregation**

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39

**Surface structure, morphology, roughness, and topography**

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117

**Surface thermodynamics (including phase transitions)**

L. Schwenger and H.-J. Ernst, K induced faceting, defaceting, and flux stabilized structures in Cu(115) 347 (1996) 25

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169

N.J. Sack and T.E. Madey, Coverage dependent azimuthal orientations of $PF_3$ on Ru(0001): adsorbate–substrate versus interadsorbate interactions in rotational dynamics 347 (1996) 367

**Surface waves**

B. Gumhalter, Different aspects of the Debye–Waller factor in various atom–surface scattering theories 347 (1996) 237

**Thermal desorption**

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

**Vibrations of adsorbed molecules**

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

G.A. Evangelakis and N.I. Papanicolaou, Adatom self-diffusion processes on (001) copper surface by molecular dynamics 347 (1996) 376

ELSEVIER

Surface Science 347 (1996) 396–400

surface science

# Materials index

## ELEMENTAL AND CHEMICAL IDENTITY

### Elements

#### *Alkali metals*

L. Schwenger and H.-J. Ernst, K induced faceting, defaceting, and flux stabilized structures in Cu(115) 347 (1996) 25

Q.B. Lu, D.J. O'Connor, B.V. King and R.J. MacDonald, Local electrostatic potential determination of Cs/Cu(111) surfaces by negative ion spectroscopy 347 (1996) L61

#### *Aluminum*

M. Parschau and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63

#### *Cadmium*

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

#### *Carbon*

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the $(1 \times 1)$CO phase on NaCl(100): a fully quantum study 347 (1996) 128

#### *Chromium*

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

#### *Cobalt*

W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117

#### *Copper*

J. Krause, D. Borgmann and G. Wedler, Photoelectron spectroscopic study of the adsorption of carbon dioxide on Cu(110) and Cu(110)/K – as compared with the systems Fe(110)/$CO_2$ and Fe(110)/K + $CO_2$ 347 (1996) 1

L. Wilde, N. Pangher and J. Haase, SEXAFS analysis of the Cu(110)-$(2 \times 3)$-N structure 347 (1996) 33

D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215

G.A. Evangelakis and N.I. Papanicolaou, Adatom self-diffusion processes on (001) copper surface by molecular dynamics 347 (1996) 376

#### *Gold*

R. Paniago, R. Matzdorf, G. Meister, A. Goldmann, J. Braun and G. Borstel, Electron diffraction in angle-resolved UV-photoemission spectra from Au(111) 347 (1996) 46

T. Furukawa and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193

A. Jablonski and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

#### *Graphite*

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169

#### *Helium*

D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215

#### *Hydrogen*

S.M. Lee and Y.H. Lee, Electronic structures of hydrogenated Si(001) surfaces 347 (1996) 329

#### *Iridium*

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

#### *Iron*

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39

T. Furukawa and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193
P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

***Molybdenum***

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39

***Nitrogen***

L. Wilde, N. Pangher and J. Haase, SEXAFS analysis of the Cu(110)-(2 × 3)-N structure 347 (1996) 33
B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39

***Palladium***

A. Rochefort, P.H. McBreen and D.R. Salahub, Bond selectivity in the dissociative adsorption of $c$-$CH_2N_2$ on single crystals: a comparative DFT-LSD investigation for Pd(110) and Cu(110) 347 (1996) 11

***Platinum***

A. Jablonski and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207
A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303

***Potassium***

J. Krause, D. Borgmann and G. Wedler, Photoelectron spectroscopic study of the adsorption of carbon dioxide on Cu(110) and Cu(110)/K – as compared with the systems Fe(110)/$CO_2$ and Fe(110)/K + $CO_2$ 347 (1996) 1

***Rhenium***

M. Parschau and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63

***Rhodium***

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53
F. Mertens and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355

***Ruthenium***

N.J. Sack and T.E. Madey, Coverage dependent azimuthal orientations of $PF_3$ on Ru(0001): adsorbate–substrate versus interadsorbate interactions in rotational dynamics 347 (1996) 367

***Silicon***

V.S. Aliev, V.N. Kruchinin and M.R. Baklanov, Adsorption of molecular fluorine on the Si(100) surface: an ellipsometric study 347 (1996) 97
T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of c(4 × 4) LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105
A.V. Dvurechenskii, V.A. Zinovyev and A.F. Faizullina, Oscillations of step velocity at sputtering of Si(111) vicinal surfaces by low-energy Xe ions 347 (1996) 111
W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117
S.M. Lee and Y.H. Lee, Electronic structures of hydrogenated Si(001) surfaces 347 (1996) 329

***Silver***

A.V. Petukhov, On the origin of surface second harmonic anisotropy on Ag(111) at low frequencies 347 (1996) 143
A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151
Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

***Tellurium***

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

***Titanium***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

***Tungsten***

M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265

***Xenon***

D.M. Danailov, D.J. O'Connor and K.J. Snowdon, Simulation of ballistic effects during scattering under glancing angles of incidence from crystal surfaces 347 (1996) 215

***Zirconium***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

**Compounds (non-molecular solids)**

***Cadmium telluride***

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

***Cobalt oxides***

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

***Gallium arsenide***

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

***Halides***

N.J. Sack and T.E. Madey, Coverage dependent azimuthal orientations of $PF_3$ on Ru(0001): adsorbate–substrate versus interadsorbate interactions in rotational dynamics 347 (1996) 367

***Indium antimonide***

C.B.M. Andersson, U.O. Karlsson, M.C. Håkansson, L.Ö. Olsson, L. Ilver, J. Kanski and P.-O. Nilsson, Surface atomic structure of InAs$(\overline{1}\overline{1}\overline{1})2\times2$ and InSb$(\overline{1}\overline{1}\overline{1})2\times2$ studied by core level spectroscopy 347 (1996) 199

***Indium arsenide***

C.B.M. Andersson, U.O. Karlsson, M.C. Håkansson, L.Ö. Olsson, L. Ilver, J. Kanski and P.-O. Nilsson, Surface atomic structure of InAs$(\overline{1}\overline{1}\overline{1})2\times2$ and InSb$(\overline{1}\overline{1}\overline{1})2\times2$ studied by core level spectroscopy 347 (1996) 199

***Iron oxide***

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

***Magnesium oxides***

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the $(1\times1)$CO phase on NaCl(100): a fully quantum study 347 (1996) 128

***Nickel oxides***

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

***Nitrides***

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39

***Silicides***

W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117

***Silicon carbide***

T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of $c(4\times4)$ LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105

**Molecules**

***Alkanes***

G.H. Peters, The molecular dynamics simulations of the melting of a hexane bilayer 347 (1996) 169

***Alkenes***

T. Takaoka, T. Takagaki, Y. Igari and I. Kusunoki, Observation of $c(4\times4)$ LEED pattern induced by reaction of Si(100) surface with $C_2H_4$ 347 (1996) 105

***Carbon dioxide***

J. Krause, D. Borgmann and G. Wedler, Photoelectron spectroscopic study of the adsorption of carbon dioxide on Cu(110) and Cu(110)/K – as compared with the systems Fe(110)/$CO_2$ and Fe(110)/K + $CO_2$ 347 (1996) 1

***Carbon monoxide***

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the $(1\times1)$CO phase on NaCl(100): a fully quantum study 347 (1996) 128

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

***Halogens***

V.S. Aliev, V.N. Kruchinin and M.R. Baklanov, Adsorption of molecular fluorine on the Si(100) surface: an ellipsometric study 347 (1996) 97

***Hydrogen***

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

***Nitrogen oxides***

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

F. Mertens and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355

*Oxygen*

A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151

M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265

A.N. Artsyukhovich, V.A. Ukraintsev and I. Harrison, Low temperature sticking and desorption dynamics of oxygen on Pt(111) 347 (1996) 303

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

**PHYSICAL STATE**

**Surfaces**

***Amorphous surfaces***

A. Jablonski and J. Zemek, Maximum probability of elastic electron backscattering from surfaces of amorphous and polycrystalline solids 347 (1996) 207

***Single crystal surfaces***

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53

M. Parschau and K. Christmann, The growth of aluminum on a rhenium ($10\bar{1}0$) surface 347 (1996) 63

Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

H. Qi, P.E. Gee and R.F. Hicks, Sites for arsine adsorption on GaAs(001) 347 (1996) 289

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

*Low index single crystal surfaces*

L. Seehofer , V.H. Etgens, G. Falkenberg, M.B. Veron, D. Brun, B. Daudin, S. Tatarenko and R.L. Johnson, Atomic motion on the CdTe(001) surface observed with scanning tunneling microscopy 347 (1996) L55

B. Eltester and C. Uebing, Surface segregation phenomena on Fe–3.5%Mo–N(100): the formation of a MoN surface compound 347 (1996) 39

R. Paniago, R. Matzdorf, G. Meister, A. Goldmann, J. Braun and G. Borstel, Electron diffraction in angle-resolved UV-photoemission spectra from Au(111) 347 (1996) 46

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53

V.S. Aliev, V.N. Kruchinin and M.R. Baklanov, Adsorption of molecular fluorine on the Si(100) surface: an ellipsometric study 347 (1996) 97

W. Weiß, U. Starke, K. Heinz, G. Rangelov, Th. Fauster and G.R. Castro, LEED structure determination of the (100)-surface of a $CoSi_2$ crystal and a $CoSi_2$ film grown epitaxially on Si(100) 347 (1996) 117

A.V. Petukhov, On the origin of surface second harmonic anisotropy on Ag(111) at low frequencies 347 (1996) 143

A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151

C.B.M. Andersson, U.O. Karlsson, M.C. Håkansson, L.Ö. Olsson, L. Ilver, J. Kanski and P.-O. Nilsson, Surface atomic structure of InAs($\overline{111}$)2 × 2 and InSb($\overline{111}$)2 × 2 studied by core level spectroscopy 347 (1996) 199

P.B. Merrill and R.J. Madix, Hydrogen bonding on iron: correlation of adsorption and desorption states on Fe(100) and perturbation of the Fe–H bond with coadsorbed CO 347 (1996) 249

M.S. Altman and E. Bauer, LEEM/LEED investigation of reconstruction and initial oxidation of the W(001) surface 347 (1996) 265

S.M. Lee and Y.H. Lee, Electronic structures of hydrogenated Si(001) surfaces 347 (1996) 329

Q.-S. Xin and X.-Y. Zhu, Is localized collision responsible for $O_2$ photodesorption from Ag(110)? 347 (1996) 346

F. Mertens and R. Imbihl, Control of the shape of chemical wave patterns in the NO + $H_2$ reaction on Rh(110) by adsorbate-induced reconstructions 347 (1996) 355

*Vicinal single crystal surfaces*

L. Schwenger and H.-J. Ernst, K induced faceting, defaceting, and flux stabilized structures in Cu(115) 347 (1996) 25

***Surface defects***

A.V. Dvurechenskii, V.A. Zinovyev and A.F. Faizullina, Oscillations of step velocity at sputtering of Si(111) vicinal surfaces by low-energy Xe ions 347 (1996) 111

**Interfaces**

***Grain boundaries***

Y. Teraoka and M. Muramatsu, Relaxation process of concentration profiles in non-equilibrium multilayers 347 (1996) 182

***Solid–gas interfaces***

V.S. Aliev, V.N. Kruchinin and M.R. Baklanov, Adsorption of molecular fluorine on the Si(100) surface: an ellipsometric study 347 (1996) 97

***Solid–liquid interfaces***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

**Adatoms**

Q.B. Lu, D.J. O'Connor, B.V. King and R.J. MacDonald, Local electrostatic potential determination of Cs/Cu(111) surfaces by negative ion spectroscopy 347 (1996) L61

G.A. Evangelakis and N.I. Papanicolaou, Adatom self-diffusion processes on (001) copper surface by molecular dynamics 347 (1996) 376

**Clusters**

A. Rochefort, P.H. McBreen and D.R. Salahub, Bond selectivity in the dissociative adsorption of $c$-$CH_2N_2$ on single crystals: a comparative DFT-LSD investigation for Pd(110) and Cu(110) 347 (1996) 11

**Coatings**

M.-N. Carré, D. Lemoine, S. Picaud and C. Girardet, He-diffraction investigation of the (1 × 1)CO phase on NaCl(100): a fully quantum study 347 (1996) 128

**ELECTRICAL AND MAGNETIC BEHAVIOR**

**Surfaces and / or films**

***Insulating films***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

M. Schönnenbeck, D. Cappus, J. Klinkmann, H.-J. Freund, L.G.M. Petterson and P.S. Bagus, Adsorption of CO and NO on NiO and CoO: a comparison 347 (1996) 337

***Metallic films***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

***Metallic surfaces***

M. Zacchigna, C. Astaldi, K.C. Prince, M. Sastry, C. Comicioli, R. Rosei, C. Quaresima, C. Ottaviani, C. Crotti, A. Antonini, M. Matteucci and P. Perfetti, Photoemission from atomic and molecular adsorbates on Rh(100) 347 (1996) 53

A. Raukema, D.A. Butler, F.M.A. Box and A.W. Kleyn, Dissociative and non-dissociative sticking of $O_2$ at the Ag(111) surface 347 (1996) 151

***Semiconducting films***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

***Semiconducting surfaces***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

**Interfaces**

***Semiconductor–electrolyte interfaces***

V.A. Marichev and L.A. Charny, Voltresistometry of noble metals and extension of measuring capability of the contact electroresistance method by using iridium reference electrodes 347 (1996) 228

**Heterostructures and thin film structures**

T. Furukawa and K. Koike, Primary energy-dependent attenuation of polarization of secondary electrons emitted from Au/Fe(110) 347 (1996) 193